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PB 209 702

AIR POLLUTION REPORT

FEDERAL FACILITIES

METROPOLITAN SAN ANTONIO

INTRASTATE AIR QUALITY CONTROL REGION

ENVIRONMENTAL PROTECTION AGENCY

Air Pollution Control Office

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ADDENDUM TO THE PUBLICATION

"AIR POLLUTION REPORT ON FEDERAL FACILITIES IN THE METROPOLITAN SAN ANTONIO INTRASTATE AIR QUALITY CONTROL REGION", May, 1971.

This inventory was prepared consistent with the report entitled "Consultation on the Metropolitan San Antonio Intrastate Air Quality Control Region", October 1969, and the geographical designation of January 20, 1970. On February 9, 1971, in line with the concept of including the entire United States in these geographical units called Air Quality Control Regions, this Region was subsequently redesignated and its boundaries expanded by the Environmental Protection Agency. Hence, the data presented herein do not reflect Federal facility emissions data for the counties of: Atascosa, Bandera, Dimmit, Edwards, Frio, Gillespie, Gonzales, Guadalupe, Karnes, Kendall, Kerr, Kimble, Kinney, La Salle, Mason, Maverick, Medina, Real, Uvalde, Val Verde, Wilson, Zavala in Texas, which have been added to the region.

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The status is presented of the Federally owned facilities within the Metropolitan San Antonio Air Quality Control Region with regard to the implementation of the objectives prescribed by the Clean Air Act, as amended. Fuel usage, refuse disposal practices, air pollution emissions and proposed abatement measures for the listed installations are reported. This Region was subsequently redesignated and its boundaries expanded, hence, the data do not reflect Federal facility emissions data for the counties of: Atascosa, Bandera, Dimmit, Edwards, Frio, Gillespie, Gonzales, Guadalupe, Karnes, Kendall, Kerr, Kimble, Kinney, La Salle, Mason, Maverick, Medina, Real, Uvalde, Val Verde, Wilson, Zavala in Texas, which have been added to the region.

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AIR POLLUTION REPORT

FEDERAL FACILITIES

METROPOLITAN SAN ANTONIO

INTRASTATE AIR QUALITY CONTROL REGION

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FEDERAL FACILITIES BRANCH
DIVISION OF ABATEMENT
AIR POLLUTION CONTROL OFFICE
ROCKVILLE, MARYLAND

MAY 1971

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NARRATIVE

This report presents the current status of the Federally owned facilities within the Metropolitan San Antonio Air Quality Control Region with regard to the implementation of the objectives prescribed by the Clean Air Act, as amended. The data in this report are the most recently available and reflect the current fuel usage, refuse disposal practices, air pollution emissions and proposed abatement measures for the listed installations.

I. BOUNDARIES OF THE AIR QUALITY CONTROL REGION

On January 20, 1970, the Metropolitan San Antonio Intrastate Air Quality Control Region was designated pursuant to section 107(a) of the Clean Air Act, as amended. The 3 county intrastate Region consists of Bexar, Comal and Guadalupe Counties, all in the State of Texas.

II. NUMBER OF FEDERAL FACILITIES

There are 63 Federal installations within the Region and of these 19 are involved in burning either fossil fuels or refuse. Table I lists those facilities and the quantities of fuel and refuse burned by each. Table II is a summary of the total annual fuel usage for the respective Counties within the Region.

III. FEDERAL CONTRIBUTIONS TO AIR POLLUTION

The Federal facilities within the Metropolitan San Antonio Air Quality Control Region emit annually a total of 2000 tons of hydrocarbons, 260 tons of nitrogen oxides (NO_x), 55 tons of particulates (PART), 140 tons of carbon monoxides (CO), and 10 tons of sulfur oxides (SO_x). Federal facilities contribute approximately 1 percent of the particulates 2 percent of the carbon monoxides and 14 percent of the sulfur oxides emitted by all stationary sources in the region.

Aircraft emissions as well as emissions from other transportation sources are not included in this report. Such emissions are significant, however. Annual emissions from Federally owned aircraft are estimated to be approximately 1278 tons of hydrocarbons, 1906 tons of particulates, 1440 tons of nitrogen oxides and 4595 tons of carbon monoxides.

Table IV lists those Federal facilities which are classified as major point sources. One such source exists in the region: Kelly AFB.

IV. REMEDIAL ABATEMENT MEASURES PROPOSED

Five Federal facilities, listed in Table VI, reported air pollution problems and/or proposed remedial measures in their 1967-1972 five

year abatement plans. These actions and the expected reductions in the air pollution emissions produced by these facilities when all of the abatement plans have been put into effect are presented by Table VII.

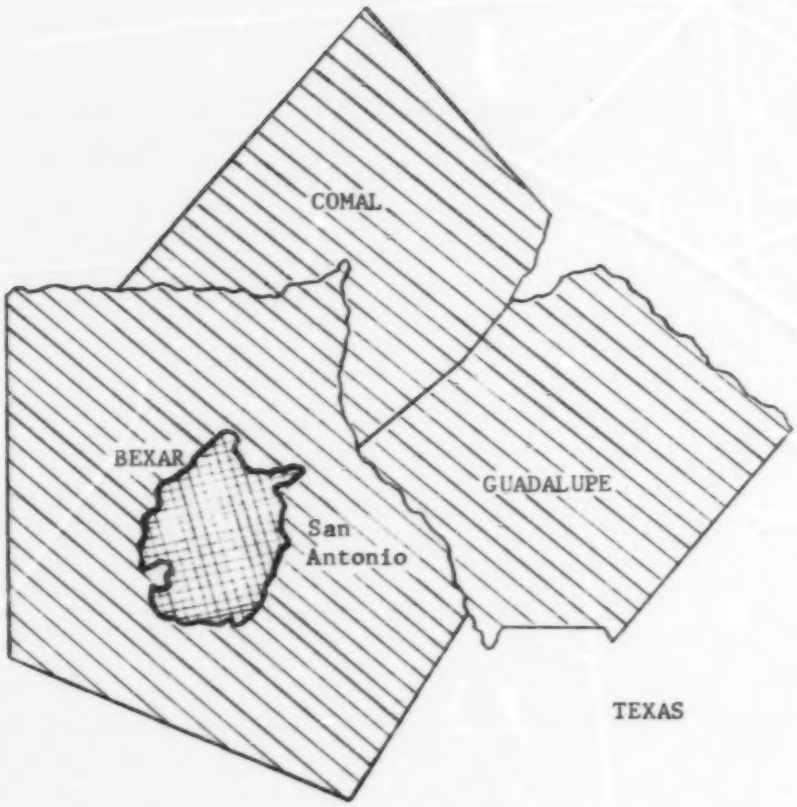

FIGURE 1

METROPOLITAN SAN ANTONIO INTRASTATE

AIR QUALITY CONTROL REGION

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN-ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
TEXAS BEXAR BROOKS AFB							
BROOKS AFB	0	315	515665	0	0	0	
TEXAS BEXAR FT SAM HOU							
FORT SAM HOU SCHOOL	0	0	8674	0	0	0	
FORT SAM HOUSTON	0	3382	122613	6990	0	20	
FT SAM HOU NATL CEMETRY	0	0	0	0	0	0	
TEXAS BEXAR HELOTES							
KELLY RRG	0	0	0	0	0	0	NAVIGATIONAL AID

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN-ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
TEXAS BEXAR KELLY AFB							
KELLY AFB	0	692	787679	0	0	0	REFUSE COLLECTED
TEXAS BEXAR LACKLAND AFB							
FAA--ARSR	0	0	0	0	0	0	LONGRANGE RADAR
LACKLAND AFB SCHOOL	0	0	1000	0	0	0	REFUSE COLLECTED
LACKLAND AIR FORCE BASE	0	1200	481917	0	0	0	
TEXAS BEXAR RANDOLPH AFB							
RANDOLPH AFB SCHOOL	0	0	4782	0	0	0	REFUSE COLLECTED

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN-ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
RANDOLPH AIR FORCE BASE	0	0	394592	0	0	0	REFUSE COLLECTED
TEXAS							
BEXAR							
SAN ANTONIO							
UPPER AIR OBSERVATORY	0	0	0	0	0	0	BALLOON LAUNCHING
VA HOSP SITE MINTER ST	0	0	0	0	0	0	NO INSTALLA-TION ON SITE
PO & CTHSE 615 E HOU ST	0	0	4000	0	0	0	
FED OFF BLDG 303 DWYER	0	0	1000	0	0	0	
FEDERAL CNTR 651 S MAIN	0	0	138660	0	0	0	

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN-ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
POST OFF SITE	0	0	0	0	0	0	
FAA--MM	0	0	0	0	0	0	MIDDLE MARKER
FAA--RCAG	0	0	0	0	0	0	VHF--RADIO EQUIPMENT
FAA--OM	0	0	0	0	0	0	OUTER MARKER
FAA--TVOR	0	0	0	0	0	0	RANGE/DIRECT AID
FAA--SX	0	0	0	0	0	0	NAVIGATIONAL AID
FAA--ALSF	0	0	0	0	0	0	APPROACH LIGHT SYSTEM

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN-ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
FAA--LOC	0	0	0	0	0	0	HORIZONTAL NAV AID
FAA--GS	0	0	0	0	0	0	VERTICAL NAV AID
FAA--VTAC	0	0	0	0	0	0	RANGE/DIRECT AID
FAA--ASR	0	0	0	0	0	0	AIRPORT RADAR
FAA--GS	0	0	0	0	0	0	VERTICAL NAV AID
FAA--LOC	0	0	0	0	0	0	HORIZONTAL NAV AID
FAA--MM	0	0	0	0	0	0	MIDDLE MARKER

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN-ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
FAA--OM	0	0	0	0	0	0	OUTER MARKER
FAA--YL	0	0	0	0	0	0	NAVIGATIONAL AID
FAA--RMLR	0	0	0	0	0	0	RADAR.MICRO-WAVE LINK
FAA--ASR	0	0	0	0	0	0	AIRPORT RADAR
FAA--RCAG	0	0	0	0	0	0	VHF RADIO EQUIPMENT
FAA--RTR	0	0	0	0	0	0	TRANSMITTER/ RECEIVER
FAA--RTR	0	0	0	0	0	0	TRANSMITTER/ RECEIVER

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN-ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
FAA--IM	0	0	0	0	0	0	NAVIGATIONAL AID
FAA--IM	0	0	0	0	0	0	NAVIGATIONAL AID
FAA--SB	0	0	0	0	0	0	NAVIGATIONAL AID
FAA--VUR	0	0	0	0	0	0	LANDING LIGHTS
NAVAL RESERV TRAINING CTR	0	0	2971	0	0	0	REFUSE COLLECTED
SAN ANTONIO NATL CEMETRY	0	0	0	0	0	0	
SAN ANTONIO RECR CTR	0	0	0	0	0	0	CLOSED

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN-ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
USARC SAN ANTONIO 02	0	0	1000	0	0	0	REFUSE COLLECTED
USARC SAN ANTONIO 03	0	0	1000	0	0	0	REFUSE COLLECTED
CAMP STANLEY STORAGE AC	0	0	0	0	0	0	STORAGE ONLY
RANDOLPH OU CMF	0	0	0	0	0	0	INCLUDED IN RANDOLPH AFB
BROOKS FHG	0	0	0	0	0	0	INCLUDED IN BROOKS AFB
RANDOLPH OM	0	0	0	0	0	0	OUTER MARKER
SAN ANTONIO AFS	0	0	0	0	0	0	STORAGE FAC ONLY

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN-ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
KELLY OM	0	0	0	0	0	0	OUTER MARKER
KELLY MM	0	0	0	0	0	0	MIDDLE MARKER
LACKLAND TNG	0	0	0	0	0	0	INCLUDED IN LACKLAND AFB
KELLY TCN	0	0	0	0	0	0	INCLUDED IN KELLY AFB
CAMP BULLIS	0	0	138	0	0	0	REFUSE COLLECTED
TEXAS COMAL GEORGETOWN							
NORTH FORK RESERVOIR	0	0	0	0	0	0	

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN-ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
TEXAS COMAL NEW BRAUNFEL							
POST OFFICE 196 N CASTEL	0	0	837	0	0	0	REFUSE COLLECTED
CANYON RESERVOIR	0	0	0	0	0	0	
NAVAL RES TRAINING CTR	0	0	200	0	0	0	REFUSE COLLECTED
CANYON LAKE RECREATION	0	0	12	0	0	0	
TEXAS GUADALUPE SEGUIN							
POST OFFICE 202 N CAMP	0	0	141	0	0	0	REFUSE COLLECTED
FAA--RMLR	0	0	0	0	0	0	RADAR MICRO-WAVE LINK

TABLE II

ANNUAL FUEL USE BY FEDERAL FACILITIES

	COAL (TONS)	RESID OIL (GAL)	DIST OIL (GAL)	GAS (MCF)
TEXAS				
BEXAR	20.	0.	6990.	2465691.
COMAL	0.	0.	0.	1049.
GUADALUPE	0.	0.	0.	141.
TOTAL	20.	0.	6990.	2466881.

TABLE III

FEDERAL CONTRIBUTION TO AIR POLLUTION
(TONS/YEAR)

	SOX	NOX	CO	PART	HC
TEXAS					
BEXAR	10.	260.	140.	55.	2000.
COMAL	0.	0.	0.	0.	0.
GUADALUPE	0.	0.	0.	0.	0.
STATE TOTAL	10.	260.	140.	55.	2000.
AREA TOTAL	10.	260.	140.	55.	2000.

NOTE: (1) EMISSIONS REPORTED IN SIGNIFICANT FIGURES
(2) EMISSIONS LESS THAN 0.5 TONS/YR REPORTED AS ZERO

TABLE IV

FEDERAL POINT SOURCES
(TONS/YEAR)

	SOX	NOX	CO	PART	HC
TEXAS					
BEXAR					
KELLY AFB	9.	130.	84.	35.	2000.

TABLE V

ABATEMENT PROGRAM FOR FEDERAL PROBLEM AREAS IN

THE SAN ANTONIO

INTRASTATE AIR QUALITY CONTROL REGION

A. Statement of problem
B. Abatement measures proposed in the five year plan*
C. Abatement measures accomplished or in progress

TEXAS

BEXAR

BROOKS AFB

Brookes AFB - Project No. AF 110

A. Sanitary Landfill - Limited land for sanitary fill available. This was interim remedial measure for replacement of four pathological waste incinerators
B. Install refuse incinerator
C. Construction scheduled for FY 72.

FORT SAM HOUSTON

Fort Sam Houston - Project No. A 127a

A. Open burning of waste oil
B. Dispose of oil by contract
C. Completed FY 70

CAMP BULLIS

Camp Bullis Project No. A125a

A. Open burning of refuse
B. Contract hauling of refuse
C. Completed May, 1970

KELLY AFB

Kelly AFB -
(1) Project No. AF 112a
A. Classified document incinerator
B. Install gas scrubber to remove particulates
C. Preliminary planning to be completed 8/71

* 1967-72 plan per Executive Order 11282, superceded by Executive Order 11507

(2) Project AF 112b
A. Hydrocarbon emission at engine overhaul facility.
B. Include fume scrubbing equipment in new engine shop.
C. Study underway.

(3) Project AF 112c
A. Engine Test cells
B. Corrective action will be programmed where NAVFAC study of nucleation scrubbers is complete
C. Deferred

LACKLAND AFB

(1) Project A 113a
A. Paper incinerator - violates 42CFR 76
B. Replace with pulper machine
C. Under design - completion 5/72

(2) Project AF113b
A. Pathological incinerator burning plastics
B. Replace with new incinerator capable of handling plastics
C. Under design - completion 5/72

(3) Project AF 113c
A. Pathological incinerator burning plastics
B. Alteration or replacement of incinerator to provide complete combustion of plastics and pathological waste.
C. Under design - completion 5/72

TABLE VI

POLLUTANT REDUCTION GOALS
(TONS/YEAR)

	SOX	NOX	CO	PART	HC
TEXAS					
BEXAR	0	0	7	2	0
COMAL	0	0	0	0	0
GUADALUPE	0	0	0	0	0
STATE TOTAL	0	0	7	2	0
AREA TOTAL	0	0	7	2	0

NOTE: THESE REDUCTIONS WILL RESULT FROM ABATEMENT MEASURES PROPOSED, BUT NOT YET ACCOMPLISHED, IN THE FIVE-YEAR PLAN.

REFERENCES AND NOTES

1. Duprey, R.L., Compilation of Air Pollutant Emission Factors, Public Health Service Publication No. 999-AP-42, 1968.

   All calculated emissions are based on these factors.

2. Report of Consultation on the Metropolitan San Antonio Intrastate Air Quality Control Region, Public Health Service October 1969.

   Data on emissions from all sources used to calculate percent government contribution were obtained from this report.

3. Clean Air Act, as amended (42 U.S.C. 1857 - 1857L) Sec 107, Sec 111. November 21, 1967.

4. Executive Order 11507, Prevention, Control, and Abatement of Air and Water Pollution at Federal Facilities, February 4, 1970.

5. Title 42 - Public Health, Chapter I, Subchapter F, Part 76, June 2, 1966.

6. Bureau of the Budget Circular A-78, May 18, 1970.

7. 1970 GSA Listing of Real Property owned by the Federal Government.